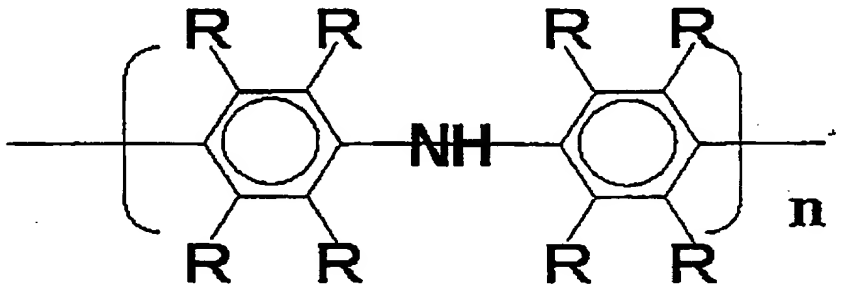
Pf-2554/nec/us/mh

What is claimed is :

1. A conductive polymer comprising a polybiphenylaniline.

2. The conductive polymer as claimed in claim 1, wherein said polybiphenylaniline is represented by the following general formula :



where R is any one of hydrogen atom, halogen atom, hydroxyl groups, carboxyl groups, sulfonic groups, sulfuric groups, nitro groups, cyano groups, alkyl groups, aryl groups, alkoxyl groups, aryloxy groups, amino groups, alkylthio groups, arylthio groups, and heterocyclic groups, provided that individuals of R are not limited to be the same.

3. The conductive polymer as claimed in claim 1, wherein said polybiphenylaniline is doped with dopant comprising at least an acid having a single site of a group which dissociates proton.

4. The conductive polymer as claimed in claim 3, wherein said acid is selected from the group consisting of a sulfuric acid, a hydrochloric acid, a perchloric acid, a benzene sulfonic acid, a p-toluene sulfonic acid,

benzenesulfonyl chloride, a dodecylbenzene sulfonic acid, a methane sulfonic acid, a trifluoromethane sulfonic acid, a butane sulfonic acid, a trichlorobenzene sulfonic acid, a naphthalene sulfonic acid, a perfluorobutane sulfonic acid, and a perfluorooctane sulfonic acid.

5. The conductive polymer as claimed in claim 1, wherein said polybiphenylaniline is doped with a dopant comprising at least one selected from acids excluding polymer acids.

6. The conductive polymer as claimed in claim 1, wherein said conductive polymer is used as an active material for an electrode.

7. The conductive polymer as claimed in claim 1, wherein said conductive polymer is used as an electromagnetic shielding material.

8. The conductive polymer as claimed in claim 1, wherein said conductive polymer is used for a conductive film.

9. The conductive polymer as claimed in claim 1, wherein said conductive polymer is used for an electro-chromic material.

10. The conductive polymer as claimed in claim 1, wherein said conductive polymer is used for an anti-static material.

11. An active material including a conductive material of claim 1.

12. An electrode using an active material of claim 11.

13. A battery using an electrode of claim 12.

14. The battery as claimed in claim 13, wherein said battery uses an electrolytic solution including an electrolyte of the same acid as doped into polybiphenylaniline.

15. An electrode using a conductive material of claim 1.

16. The electrode as claimed in claim 15, wherein said electrode is used in a semiconductor device.

17. The electrode as claimed in claim 15, wherein said electrode is used in an electronic device.

18. The electrode as claimed in claim 15, wherein said electrode is used in an electric device.